



Overview

Points To Remember About Hip Replacement Surgery

- Hip replacement surgery removes damaged or diseased parts of a hip joint and replaces them with new, man-made parts.
- The goals of hip replacement surgery are to relieve pain, help the hip joint work better, and improve walking and other movements.
- Risks of problems after hip replacement surgery are much lower than they used to be.
- People usually spend one to four days in the hospital after hip replacement surgery. It takes about three to six months to be completely well.
- An exercise program can reduce joint pain and stiffness.
- Wearing away of the joint surface may become a problem after 15 to 20 years, and may require replacement of the joint.

The hip joint is located where the upper end of the femur (thigh bone) meets the pelvis (hip bone). A ball at the end of the femur, called the femoral head, fits in a socket (the acetabulum) in the pelvis to allow a wide range of motion.

Hip replacement, or arthroplasty, is a surgical procedure in which the diseased parts of the hip joint are removed and replaced with new, artificial parts. These artificial parts are called the prosthesis.

The goals of hip replacement surgery include increasing mobility, improving the function of the hip joint, and relieving pain.

Types

There are two primary types of hip replacement surgery:

Traditional surgery: During a traditional hip replacement, which lasts from 1 to 2 hours, the surgeon makes a 6- to 8-inch incision over the side of the hip through the muscles and removes the diseased bone tissue and cartilage from the hip joint, while leaving the healthy parts of the joint intact. Then the surgeon replaces the head of the femur and acetabulum with new, artificial parts. The new hip is made of materials that allow a natural gliding motion of the joint.

Minimally invasive surgery: Some surgeons perform what is called a minimally invasive, or mini-incision, hip replacement, which requires smaller incisions and a shorter recovery time than traditional hip replacement. Candidates for this type of surgery are usually age 50 or younger, of normal weight based on body mass index, and healthier than candidates for traditional surgery. Joint resurfacing is also being used.

Regardless of whether you have traditional or minimally invasive surgery, the parts used to replace the joint are the same and come in two general varieties: cemented and uncemented.

- *Cemented replacements*, which fasten artificial parts to healthy bone with a special glue or cement. These replacements are typically used for older, less active people and people with weak bones.
- *Uncemented replacements*, which use artificial parts with a porous surface. This allows bone to grow into the pores to hold the new parts in place. These replacements are typically used for younger, more active people. Because it takes a long time for the natural bone to grow and attach to the prosthesis, activity must be limited for up to three months to protect the hip joint. Thigh pain may occur while the bone is growing into the prosthesis.
- *Hybrid replacements* use a cemented femur part and uncemented acetabular part.

Why is this surgery needed?

Common reasons for hip replacement surgery include damage to the hip joint from:

- Arthritis.
- Disease that breaks down the bone in the joint.
- Injuries or fractures.
- Bone tumors that break down the hip joint.

If hip joint damage causes pain and interferes with daily activities, your doctor may try treatments such as exercise, walking aids (canes and walkers), and medication. If these treatments do not relieve pain and improve joint function, the doctor may suggest either hip replacement surgery or a less complex corrective surgery. One alternative to hip replacement is osteotomy, which involves cutting and realigning bone to shift the weight to a healthier bone surface.

In the past, hip replacement surgery was mostly done in people over 60 years of age. The thinking was that older people are less active, which puts less stress on the artificial hip. However, new technologies have improved artificial parts so that they handle more stress and last longer. This means that hip replacement surgery can also be successful in younger people.

Hip replacement may not be recommended for people with certain health conditions, such as:

- Parkinson's disease.
- Conditions that result in severe muscle weakness, which increases the risk of damaging or dislocating an artificial hip.
- People at high risk for infections or in poor health, since they are less likely to recover successfully.

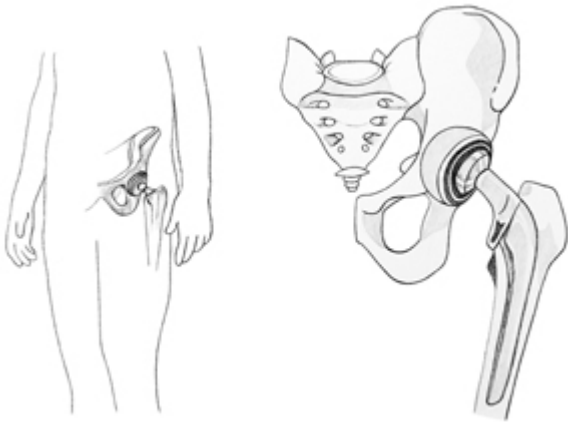
Preparing for surgery

You can do a number of things before hip replacement surgery to make everyday tasks easier and help speed your recovery.

- Learn what to expect. Request written information from the doctor, or learn more about the procedure by visiting one of the websites listed near the end of this publication.
- Arrange for transportation to and from the hospital.
- Arrange for someone to help you around the house for a week or two after coming home from the hospital.
- Stock up on kitchen supplies and prepare food in advance, such as frozen casseroles or soups that can be reheated and served easily.
- Set up a "recovery station" at home:
 - Place the television remote control, telephone, medicine, tissues, wastebasket, and pitcher and glass next to the spot where you will spend the most time while you recover.
 - Place other items you use every day at arm's level to avoid reaching up or bending down.

What to expect during surgery

During hip replacement, which lasts from one to two hours, your doctors:



Hip Replacement Location

- Will give you medicine to put your whole body to sleep so that you won't feel pain.
- Makes a 6- to 8-inch incision over the side of the hip. Your surgeon may recommend a minimally invasive hip replacement, which requires smaller incisions. Candidates for minimally invasive hip replacement surgery are usually:
 - Age 50 or younger.
 - Normal weight based on body mass index.
 - Healthier than candidates for traditional surgery.
- Removes the diseased bone tissue and cartilage from the hip joint, while leaving the healthy parts of the joint in place.
- Replaces the head of the femur and acetabulum with new, artificial parts.
- Move you to a recovery room for one to two hours until you are fully awake or the numbness goes away.

What to expect afterward

Immediate. Usually, people do not spend more than one to four days in the hospital after hip replacement surgery. It is important to get instructions from your doctor before leaving the hospital and to follow them carefully once you get home. Doing so will give you the greatest chance of a successful surgery.

- Immediately after your hip surgery:
 - You will be allowed only limited movement.
 - When you are in bed, pillows or a special device will brace the hip in the correct position.
 - You may receive fluids through an intravenous tube to replace fluids lost during surgery.
 - Drains may also be located near the incision to drain fluid, and a catheter may be inserted to remove urine until you can use the bathroom.
 - The doctor will prescribe medicine for pain or discomfort.
- The day of or day after surgery:
 - Therapists will teach you exercises to improve recovery.
 - A respiratory therapist may ask you to breathe deeply, cough, or blow into a simple

device that measures lung capacity. These exercises reduce the collection of fluid in the lungs after surgery.

- As early as one to two days after surgery:
 - You may be able to sit on the edge of the bed, stand, and even walk with assistance.
 - A physical therapist may teach you exercises to strengthen the hip. The physical therapist also will teach you how to perform daily activities without injuring your new hip.
- Once you return home you should:
 - Follow the doctor's instructions.
 - Wear an apron for carrying things around the house. This leaves hands and arms free for balance or to use crutches.
 - Use a long-handled "reacher" to turn on lights or grab things that are beyond arm's length. Hospital personnel may provide one of these or suggest where to buy one.
 - Work with a physical therapist or other health care professional to rehabilitate your hip.

Long term. Full recovery from hip replacement surgery takes about three to six months, depending on the type of surgery, your overall health, and the success of your rehabilitation.

You should talk to your doctor or physical therapist about an appropriate exercise program, which can reduce stiffness, increase flexibility, and strengthen muscles. Most of these programs begin with safe range-of-motion activities and muscle-strengthening exercises. The doctor or therapist will decide when you can move on to more demanding activities.

Revision surgery (replacement of an artificial joint) is becoming more common as more people are having hip replacements at a younger age. This is because wearing away of the joint surface becomes a problem after 15 to 20 years. Doctors consider revision surgery when:

- Medication and lifestyle changes do not relieve pain and disability.
- X-rays show bone loss, wearing of the joint surfaces, or joint loosening.
- Fracture, dislocation of the artificial parts, or infection occur.

Possible complications

New technology and advances in surgical techniques have greatly reduced the risks involved with hip replacements. More common problems that could occur include:

- Hip dislocation, in which the ball becomes dislodged from the socket if the hip is placed in certain positions (such as pulling the knees up to the chest). This is the most common problem that may arise soon after hip replacement surgery.
- An inflammatory reaction to tiny particles that gradually wear off of the artificial joint surfaces and are absorbed by the surrounding tissues. The inflammation may trigger the action of special cells that eat away some of the bone, causing the implant to loosen. This is the most common later complication of hip replacement surgery.

Less common complications include:

- Infection: Warning signs include fever, chills, tenderness and swelling, or drainage from the wound.
- Blood clots: Warning signs include tenderness, redness and swelling of your calf; or swelling of your thigh, ankle, or foot.
- Bone growth beyond the normal edges of bone.

You should call your doctor if you experience any symptoms listed above.

Life after surgery

For the majority of people who have hip replacement surgery, the procedure results in:

- Reduced pain.
- Increased mobility.
- Improvements in activities of daily living.
- Improved quality of life.

Many doctors recommend avoiding high-impact activities, such as basketball, jogging, and tennis. These activities can damage the new hip or cause loosening of its parts. Talk to your doctor about exercises to increase muscle strength and cardiovascular fitness without injuring the new hip. These exercises can include:

- Walking.
- Stationary bicycling.
- Swimming.
- Cross-country skiing.

Research progress

Research on hip replacement surgery is exploring:

- New surgical techniques and improved prosthesis designs, to increase the chance of surgical success and decrease the risk of complications.
- Characteristics that make some people more likely to have successful surgery.
- Use of various agents to minimize bone loss around the implant.
- Techniques and programs to improve recovery and rehabilitation.

Related resources

U.S. Food and Drug Administration

Toll free: 888-INFO-FDA (888-463-6332)

Website: <https://www.fda.gov>

Drugs@FDA at <https://www.accessdata.fda.gov/scripts/cder/daf/>. Drugs@FDA is a searchable catalog of FDA-approved drug products.

Centers for Disease Control and Prevention, National Center for Health Statistics

Website: <https://www.cdc.gov/nchs>

NIH Osteoporosis and Related Bone Diseases ~ National Resource Center

Website: <https://www.bones.nih.gov>

American Academy of Orthopaedic Surgeons

Website: <https://www.aaos.org>

American Physical Therapy Association

Website: <https://www.apta.org>

Arthritis Foundation

Website: <https://www.arthritis.org>

The Hip Society

Website: <https://www.hipsoc.org/hipsoc>

If you need more information about available resources in your language or other languages, please visit our webpages below or contact the NIAMS Information Clearinghouse at NIAMSInfo@mail.nih.gov.

- [Asian Language Health Information](#)
- [Spanish Language Health Information](#)

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